CLAIMS

1. A structural building element formed from cold-rolled lightweight sheet steel, with a generally C-shaped profile having a front comprising a pair of front wall portions extending outwardly from a central slot opening to a pair of lateral sides of the building element, and a rear wall portion joining together the lateral sides, wherein each of the pair of front wall portions extends in a substantially smooth arc from the central slot opening onto the corresponding lateral side, and the rear wall portion comprises a pair of convex wall portions each extending in a substantially smooth arc from a concave substantially arcuate rear central wall portion onto a respective one of the lateral sides.

2. A structural building element according to claim 1, wherein the cold-rolled sheet steel has a thickness of 0.5 mm to 2 mm.

3. A structural building element according to claim 1, wherein the cold-rolled sheet steel has a thickness of about 0.8 mm.

4. A structural building element according to claim 1, wherein the lateral sides each have a flat portion centrally thereon, and the front portions join the flat portions tangentially.

5. A structural building element according to claim 1, wherein the rear central wall portion comprises a flat portion bounded by two concave substantially arcuate wall portions from which the pair of convex wall portions of the rear wall portion extend.

6. A connector for connecting together two structural building elements of claim 1 in a T-or L-configuration, comprising a pair of side portions each formed as a substantially arcuate jaw element shaped to conform to a lateral side or a front portion or a convex arcuate portion of a rear of one of the structural building elements to be connected together, and a leg portion extending from the jaw element, whereby when the jaw elements are secured to opposite faces of the said one of the structural elements with the leg portions mutually aligned, the leg portions cooperate to form a profiled spur extending laterally from the said one of the structural elements, with a profile corresponding to that of the other of the structural elements to be connected

together, for sleeving the said other of the structural elements onto or into the profile of the spur.

7. A connector according to claim 6, wherein each of the jaw elements of the side portions is pre-punched with a hole located to correspond to a respective one of a pair of pre-punched holes in the said one of the structural building elements to be connected together, for receiving a fixing element to define the angle made by the spur to the profile of the said one of the structural elements.

8. A connector for connecting together three structural building elements of claim 1 in a cross configuration, comprising a pair of side portions each formed as a generally convex jaw element shaped to conform to a front or rear portion of one of the structural building elements to be connected together, and two co-linear leg portions extending one from each side from the jaw element, whereby when the jaw elements are secured to opposite front and rear faces of the said one of the structural elements with the pairs of leg portions of the jaw elements mutually aligned, each pair of mutually aligned leg portions cooperates to form a profiled spur extending laterally from the said one of the structural elements, each spur having a profile corresponding to that of one of the others of the structural elements to be connected together, for sleeving the said others of the structural elements onto or into the profiles of the spurs.

9. A connector for connecting together three structural elements of claim 1 in a K-configuration, comprising two mating halves each press- formed from sheet steel, which together define three tubular cavities in a K- configuration for receiving a central portion and two end portions respectively of the three structural building elements of claim 1.

10. A connector according to claim 9, wherein the sheet steel of the two connector halves is deep-drawn to an extent such that the mating halves have zones of mutual contact, and the connector halves are welded together in the zones.

11. A connector according to claim 6, wherein the leg portion joins the jaw elements along an arcuate edge of the material from which the connector is made.

12. A connector according to claim 11, wherein the material from which the connector is made is lightweight sheet steel.

13. A connector according to claim 12, which is press-formed.